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FEDERAL AVIATION REGULATIONS

Department of Transportation
Federal Aviation Administration—Washington, D.C.

CHANGE 6 **EFF. DECEMBER 8, 1980**

Part 139—Certification and Operations: Land Airports Serving CAB-Certified Air Carriers

The Special Federal Aviation Regulations (SFARs) are now being incorporated in the FAA publication of their related Parts.

Accordingly, this Change incorporates SFAR 41B, Increase in Approved Takeoff Weights and Passenger Seating Capacities, effective December 8, 1980, in Federal Aviation Regulation Part 139. SFAR 41 and SFAR 41A are also in this Change.

The effective date of the new material, which is marked by black brackets, is carried at the bottom of each page. The preamble pages to SFAR 41 carry the Change number only.

Page Control Chart

Remove Pages	Dated	Insert Pages	Dated
I	11/9/78	I	11/9/78
II	——	II	Ch. 6
		15 thru 19	Ch. 6
		21	Ch. 6
		22	12/8/80
		23 thru 26	Ch. 6

Suggest filing this transmittal at the back of the FAR. It will provide a method for determining that all Changes have been received as listed in the current edition of AC 00-44, Status of Federal Aviation Regulations, and a check for determining if the FAR contains the proper pages.

Part 139—Certification and Operations: Land Airports Serving CAB-Certificated Air Carriers

Contents

Section		*Page*
Preambles		P-1
	Subpart A—General	
139.1	Applicability	1
139.3	Certification: general	1
139.5	Inspection authority	1
139.7	Amendment of certificate	1
139.9	Amendment of airport operations manual or airport operations specifications	2
	Subpart B—Certification	
139.11	Issue of certificate	2
139.12	Provisional airport operating certificates	2
139.12a	Issue of limited certificates for airports serving only unscheduled operations, or operations with small aircraft	3
139.13	Application for certificate	3
139.15	Contents of certificate	4
139.17	Duration of certificate	4
139.19	[Exemptions]	4
139.21	Deviations	4
139.23	Personnel	4
	Subpart C—Airport Operations Manual	
139.31	Preparation and maintenance	4
139.33	Contents	4
	Subpart D—Certification Eligibility: Airports Other Than Heliports	
139.41	Eligibility requirements: general	5
139.43	Pavement areas	5
139.45	Safety areas	5
139.47	Marking and lighting runways, thresholds, and taxiways	6
139.49	Airport fire fighting and rescue equipment and service	6
139.51	Handling and storing hazardous articles and materials	8
139.53	Traffic and wind direction indicators	8
139.55	Emergency plan	8
139.57	Self-inspection program	9
139.59	Ground vehicles	9
139.61	Obstructions	9
139.63	Protection of navaids	10

Contents—Continued

Section		Page
139.65	Public protection	10
139.67	Bird hazard reduction	10
139.69	Airport condition assessment and reporting	10
139.71	Identifying, marking, and reporting construction and other unserviceable areas	10
	Subpart E—Operations	
139.81	Operations rules: general	10
139.83	Pavement areas	11
139.85	Snow removal and positioning	11
139.87	Cleaning and replacing lighting items	11
139.89	Airport fire fighting and rescue equipment and service	11
139.91	Self-inspection	12
139.93	Maintenance of approach and other imaginary surfaces	12
	Subpart F—Certification Eligibility: Heliports	
139.101	Eligibility requirements: general	12
139.103	Marking and lighting	12
139.105	Heliport firefighting and rescue equipment and service	12
139.107	Traffic and wind direction indicators	13
139.109	Public protection	13
139.111	Airport condition assessment and reporting	13
139.113	Identifying, marking, and reporting construction and other unserviceable areas	13
	Subpart G—Operations: Heliports	
139.121	Operational rules: general	14
139.123	Pavement areas	14
139.125	Snow removal and positioning	14
139.127	Airport firefighting and rescue equipment and service	14
Special Federal Aviation Regulation 41—Airworthiness Standards: Reciprocating and Turbopropeller-Powered Small Multiengine Airplanes—Increase in Approved Takeoff Weights and Passenger Seating Capacities *(Preamble)*		15
Special Federal Aviation Regulation 41 *(Rule)*		21

Special Federal Aviation Regulation 41

Airworthiness Standards: Reciprocating and Turbopropeller-Powered Small Multiengine Airplanes—Increase in Approved Takeoff Weights and Passenger Seating Capacities

Adopted: September 7, 1979 **Effective: October 17, 1979**

(Published in 44 FR 53723, September 17, 1979)

SUMMARY: This amendment adopts a new Special Federal Aviation Regulation (SFAR) which prescribes additional airworthiness standards applicable to existing propeller driven multiengine small airplanes to allow their type and airworthiness recertification at weights in excess of the limitation of 12,500 pounds maximum certificated takeoff weight, or with an increase in the number of passenger seats, or both. The rules applicable to air taxi and commercial operators (Part 135) are amended to allow the operation of airplanes certificated under the SFAR. In addition, the operating rules (Parts 91 and 135) are amended to require that airplanes certificated under the SFAR at weights in excess of 12,500 pounds meet updated interior material flammability requirements within one year of initial airworthiness certification. These amendments are intended to allow the design capabilities of certain existing small airplanes to be more fully utilized. They are also designed to increase aircraft availability for the commuter market that is burgeoning since enactment of the Airline Deregulation Act of 1978.

FOR FURTHER INFORMATION CONTACT:

Raymond E. Ramakis, Safety Regulations Staff (AVS-24), Federal Aviation Administration, 800 Independence Avenue, S.W. Washington, D.C. 20591 Telephone (202) 755-8716.

* * * * *

ADOPTION OF THE AMENDMENT

Accordingly, the Federal Aviation Regulations (14 CFR Chapter I) are amended, effective October 17, 1979.

(Secs. 313(a), 601, 603, and 604, Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1421, 1423, and 1424); sec. 6(c) of the Department of Transportation Act (49 U.S.C. 1655(c)).

NOTE—The FAA has determined that this document involves a regulation which is not significant under Executive Order 12044, as implemented by DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). A copy of the final evaluation prepared for this action is contained in the regulatory docket. A copy of it may be obtained by writing to Raymond E. Ramakis, Safety Regulations Staff (AVS-24), Federal Aviation Administration, 800 Independence Avenue, S.W., Washington, D.C. 20591.

NOTE: The complete preamble to SFAR 41 is contained in Change 35 to Part 91 in Amendment 91-159.

Special Federal Aviation Regulation 41A

Increase in Approved Takeoff Weights and Passenger Seating Capacities: Correction

Adopted: April 7, 1980 **Effective: April 14, 1980**

(Published in 45 FR 25046, April 14, 1980)

SUMMARY: This action makes editorial corrections to Special Federal Aviation Regulation (SFAR) 41 adopted on September 7, 1979. The SFAR prescribes additional airworthiness requirements applicable to certain existing multiengine small airplanes to allow an increase in approved takeoff weights and passenger seating capacities.

FOR FURTHER INFORMATION CONTACT:

Eli S. Newberger, Safety Regulations Staff, AVS-24, Federal Aviation Administration, 800 Independence Ave., S.W., Washington, D.C. 20591, Telephone (202) 755-8716.

SUPPLEMENTARY INFORMATION:

This amendment of SFAR 41 (44 FR 53723, September 17, 1979) is editorial in nature to provide an omitted date, change an incorrectly stated date, and delete a regulatory reference listed in error.

As indicated in the preamble, SFAR 41 is applicable to existing propeller-driven multiengine small airplanes. The existing airplanes eligible for amended or supplemental type certificates are those type certificated prior to the effective date of the SFAR; i.e., October 17, 1979. This amendment provides the omitted date in paragraphs 1.(a) and 1.(b).

Paragraph 5.(b)(3) of the SFAR inadvertently cites the certification cutoff date of the given class of airplanes as July 1, 1970. Since this paragraph parallels § 135.169(b)(3), for consistency, the date is corrected to July 19, 1970.

Of the three sections of Appendix A, Part 135, referenced in paragraph 5.(c) of the SFAR, section 19.(b)(3) does not relate to landing requirements and was inadvertently included. Paragraph 5.(c) and the corresponding preamble discussion are amended by deleting the erroneous reference.

This amendment corrects the editorial errors as noted and good cause exists for making the amendment effective upon publication in the FEDERAL REGISTER [April 14, 1980].

ADOPTION OF AMENDMENT

Accordingly, the preamble of SFAR 41 and the text of SFAR 41 of the Federal Aviation Regulations (14 CFR SFAR 41) are amended, effective April 14, 1980.

[Secs. 313(a), 601, 603, and 604, Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1421, 1423, and 1424); Sec. 6(c), Department of Transportation Act (49 U.S.C. 1655(c)).]

NOTE: The FAA has determined that this document involves a regulation which is not significant under Executive Order 12044, as implemented by DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979).

Special Federal Aviation Regulation 41B

Increase in Approved Takeoff Weights and Passenger Seating Capacities

Adopted: December 2, 1980 **Effective: December 8, 1980**

(Published in 45 FR 80972, December 8, 1980)

SUMMARY: This amendment specifies the additional requirements for airplane designs certificated under Special Federal Aviation Regulation No. 41 (SFAR 41) that are necessary to comply with the airworthiness standards of International Civil Aviation Organization (ICAO), Annex 8. Manufacturers or modifiers of these airplanes may voluntarily elect to comply with these additional requirements to facilitate international operations. SFAR 41 was issued on September 7, 1979, and amended on April 7, 1980, to clarify its applicability. SFAR 41 prescribes additional airworthiness standards applicable to existing propeller-driven multiengine small airplanes to allow their type and airworthiness certification at weights in excess of 12,500 pounds maximum certificated takeoff weight, or with an increase in the number of passenger seats, or both.

Comments must be received on or before March 9, 1981.

FOR FURTHER INFORMATION CONTACT:

Eli S. Newberger, Regulatory Projects Branch (AVS-24), Safety Regulations Staff, Associate Administrator for Aviation Standards, Federal Aviation Administration, 800 Independence Ave., S.W., Washington, D.C. 20591. Telephone (202) 755-8716.

ADDRESS: Comments on this amendment may be mailed in duplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attn: Rules Docket (AGC-204), Docket No. 18315, 800 Independence Avenue, SW., Washington, D.C. 20591; or delivered in duplicate to: Room 916, 800 Independence Avenue, SW., Washington, D.C. 20591. All comments must be marked: Docket No. 18315. Comments may be inspected in the Rules Docket weekdays, except Federal holidays, between 8:30 a.m. and 5:00 p.m.

SUPPLEMENTARY INFORMATION:

Background

SFAR 41 was issued to provide for increased availability and utility of existing small multiengine propeller-driven airplanes in U.S. domestic commuter service by permitting type and airworthiness certification at weights above the limitation of 12,500 pounds maximum certificated takeoff weight. The SFAR permits an increase in the maximum certificated takeoff weight above 12,500 pounds, or an increase in passenger seating, or both, provided the maximum zero fuel weight does not exceed 12,500 pounds. Aircraft eligible for compliance with the SFAR must have been certificated to Federal Aviation Regulations Part 23 (FAR 23) prior to October 17, 1979, and an application for certification to SFAR 41 for the airplane must be filed prior to October 17, 1981. The production of airplanes certificated above 12,500 pounds, however, will be limited to 10 years after the effective date of SFAR 41, that is, until October 17, 1989.

No limitation has been established for the operational life of individual aircraft that were manufactured in conformance to a design approved under SFAR 41 prior to October 17, 1989.

Discussion

Certification under SFAR 41, as that regulation is presently worded, requires an endorsement on the airworthiness certificate to indicate that the airplane at weights in excess of 5,700 kg (12,566 pounds) does not meet ICAO Annex 8, *"International Standards, Airworthiness of Aircraft, to the Convention on International Civil Aviation."* In the public rulemaking process followed before adoption of SFAR 41, technical differences were acknowledged to exist between SFAR 41 and ICAO Annex 8. After issuance of the SFAR, it was called to the FAA's attention that certain airplanes certificated to SFAR 41 could also be shown to comply with ICAO Annex 8. As written, however, SFAR 41 specifically re-

quires all individual airworthiness certificates issued for aircraft type certificated under SFAR 41 to be specifically annotated otherwise. The purpose of this amendment is to eliminate this contradiction and allow those aircraft which do comply with ICAO Annex 8 to be free of statements to the contrary on their airworthiness certificates.

Article 33 of the Convention on International Civil Aviation (Chicago Convention) provides for the recognition of airworthiness certificates between contracting States when the airworthiness standards established by the Convention are met. The airworthiness standards established by the Convention are contained in ICAO Annex 8. Part III of ICAO Annex 8 sets forth objective standards applicable to airplanes of over 5,700 kg (12,566 pounds), maximum certificated takeoff weight intended for the carriage of passengers or cargo or mail in international air navigation. Noncompliance with these standards could seriously inhibit the international operations of affected airplanes.

The FAA, in the period since issuance of SFAR 41, has compared the airworthiness standards in Part III of ICAO Annex 8 with the airworthiness standards in FAR 23 plus SFAR 41. In this connection, the FAA has determined which specific FAR 25 airworthiness requirements must be met to ensure compliance with ICAO Annex 8, and they are listed in the body of the rule. It should be emphasized that the election to seek a more flexible international operations capability for airplanes already certificated to SFAR 41 by complying with these additional requirements is voluntary.

When an applicant elects to comply with the additional requirements of this amendment, the type certification basis statement on the type certificate data sheet or supplemental type certificate will indicate that the design meets the requirements of ICAO Annex 8. Aircraft covered under these certificates are excepted from the airworthiness certificate endorsement required by section 4(b) of SFAR 41. Applications for certification under SFAR 41 must be on file before October 17, 1981. However, applications for certification under the additional standards contained in this amendment may be made at any time for aircraft already certificated to SFAR 41. Since the additional standards of this amendment reflect specific standards of FAR 25 which may change after this amendment, the standards cited are those in effect on October 17, 1979, the effective date of SFAR 41.

Request For Comments

Interested persons are invited to submit comments on only this amendment. Communications should identify the docket number and be submitted in duplicate to the address specified above. All communications received on or before the closing date for comments will be considered by the Administrator. This amendment may be changed in the light of the comments received. All comments received will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons.

Notice and Public Procedure

The FAA recognizes that although the objective of SFAR 41 was met to increase the utilization of certain FAR 23 aircraft in U.S. domestic commuter service, difficulties may be encountered with the operation of such aircraft in foreign countries to the extent that the FAA precludes these aircraft from meeting the standard of ICAO Annex 8. In view of this, the FAA has determined those standards that will permit the voluntary compliance by persons seeking to undertake international operations with airplanes certificated under SFAR 41. Since this action is necessary to avoid imposing an undue burden on the international operations of these airplanes and since the FAA had no intention to preclude voluntary compliance with ICAO Annex 8 when SFAR 41 was issued, I find that notice and public procedure are impractical and contrary to the public interest and that good cause exists for making this amendment effective in less than 30 days. Accordingly, this amendment is effective on the date it is published in the *Federal Register* (45 FR 80972, 12/8/80).

ADOPTION OF AMENDMENT

In consideration of the foregoing, SFAR 41 of the Federal Aviation Regulations [14 CFR SFAR 41] is amended effective December 8, 1980.

[Sec. 313(a), 601, 603, 604, Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1421, 1423, 1424); Sec. 6(c), Department of Transportation Act (49 U.S.C. 1655(c))]

NOTE: The FAA has determined that this document involves an amendment which is not considered to be significant under the procedures and criteria prescribed by Executive Order 12044 as implemented by Department of Transportation Policies and Regulatory Procedures (44 FR 11034; February 26, 1979). A copy of the final evaluation prepared for this action is contained in the regulatory docket. A copy of it may be obtained by contacting the person identified above under the caption "FOR FURTHER INFORMATION CONTACT".

This rule is a final order of the Administrator as defined by Section 1005 of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1485). As such, it is subject to review only by the courts of appeals of the United States or the United States Court of Appeals for the District of Columbia.

Special Federal Aviation Regulation 41

1. *Applicability.* (a) Contrary provisions of Parts 21 and 23 of the Federal Aviation Regulations notwithstanding, an applicant is entitled to an amended or supplemental type certificate in the normal category for a reciprocating or turbopropeller-powered multiengine small airplane originally type certificated prior to October 17, 1979, in accordance with Part 23 of the Federal Aviation Regulations in effect on March 31, 1971, or later, that is to be certificated with a passenger seating configuration, excluding pilot seats, of 10 seats or more (but not more than 19 seats) at a maximum certificated takeoff weight of 12,500 pounds or less, if the applicant complies with—

(1) The regulations incorporated in the type certificate; and

(2) The requirements of Appendix A of Part 135 of the Federal Aviation Regulations in effect on September 26, 1978.

(b) Contrary provisions of Parts 1, 21, 23, 91, 121, and 135 of the Federal Aviation Regulations notwithstanding, an applicant is entitled to an amended or supplemental type certificate in the normal category for a reciprocating or turbopropeller powered multiengine airplane originally type certificated prior to October 17, 1979, that is to be certificated with a maximum takeoff weight in excess of 12,500 pounds, a maximum zero fuel weight not in excess of 12,500 pounds, and, where requested by the applicant, an increase in passenger seating configuration, if the applicant complies with—

(1) The regulations incorporated in the type certificate;

(2) The requirements of Appendix A of Part 135 of the Federal Aviation Regulations in effect on September 26, 1978 with the exceptions specified in section 5 of this Special Federal Aviation Regulation; and

(3) The additional requirements specified in sections 7 through 14 of this Special Federal Aviation Regulation applicable to takeoff weights in excess of 12,500 pounds.

(c) Contrary provisions of Part 1 of the Federal Aviation Regulations notwithstanding, an airplane certificated under paragraph (b) of this section is considered to be a small airplane for purposes of Parts 21, 23, 36, 121, 135, and 139 of the Federal Aviation Regulations and a large airplane for purposes of Parts 61 and 91. Compliance with the small airplane provisions of Part 36 of the Federal Aviation Regulations must be shown at the maximum certificated takeoff weight approved under this Special Federal Aviation Regulation.

2. *Eligibility.* Any person may apply for a supplemental type certificate (or an amended type certificate in the case of a type certificate holder) under this Special Federal Aviation Regulation.

3. *Production limitation.* An amended or supplemental type certificate issued pursuant to section 1.(b) of this Special Federal Aviation Regulation is effective for the purpose of obtaining an original or an amended airworthiness certificate, until October 17, 1989, unless the type certificate is sooner surrendered, suspended, revoked, or terminated.

4. *Restrictions.* For airplanes certificated under section 1.(b) of this Special Federal Aviation Regulation—

(a) The maximum zero fuel weight of the airplane must be established as an operating limitation and may not exceed 12,500 pounds; and

(b) [Except as provided in paragraph (c) of this section,] the airworthiness certificate shall be endorsed "This airplane at weights in excess of 5,700 kg does not meet the airworthiness requirements of ICAO, as prescribed by Annex 8 of the Convention on International Civil Aviation."

[(c) An applicant is entitled to type certificate amendment or a supplemental type certificate that shows compliance with ICAO Annex 8 if the airplane meets SFAR 41 and the following requirements prescribed by the Administrator in effect on October 17, 1979:

[(1) At each weight, altitude, and temperature within the operational limits selected by the applicant—

[(i) For approach climb performance, comply with §§ 25.121(d) and 25.1533(a) (2).

[(ii) For takeoff performance, comply with §§ 25.105(d), 25.111, 25.113(a), and 25.115.

[(2) For gust loads design at rough air gust speed $V_{B,}$ comply with §§ 25.335(d), 25.341(a) (1), and 25.351(b).

[(3) For smoke evacuation design, comply with § 25.831(d).

[(4) For engine rotation and restarting design, comply with §§ 25.903(c) and (e).

[(5) For engine cooling design, comply with § 25.1521(e).]

5. *Exceptions.* For purposes of obtaining an amended or supplemental type certificate under section 1.(b) of this Special Federal Aviation Regulation, the following exceptions apply. All references in this section to specific sections of Parts 23 and 25 of this chapter are to those in effect on September 26, 1978 if no other date is given:

(a) Compliance with section 1 of Appendix A of Part 135 of the Federal Aviation Regulations is not required.

(b) Compliance may be shown with the applicable regulations incorporated in the type certificate in lieu of the requirements of Appendix A of Part 135 of the Federal Aviation Regulations for takeoff weights of 12,500 pounds or less, if the airplane was type certificated—

(1) Under FAR Part 23 in effect prior to Amendment 23-10 and the airplane is to be used only in FAR Part 91 operations;

(2) Before July 1, 1970, in the normal category with a passenger seating configuration, excluding any pilot seat, of 10 seats or more, and meets special conditions issued by the Administrator for airplanes intended for use in operations under FAR Part 135; or

(3) Before July 19, 1970, in the normal category with a passenger seating configuration, excluding any pilot seat, of 10 seats or more, and meets the additional airworthiness standards in Special Federal Aviation Regulation No. 23.

(c) In lieu of compliance with sections 7., and 19.(c) of Appendix A of Part 135 of the Federal Aviation Regulations, comply with the following at takeoff weights in excess of 12,500 pounds:

Landing.

(a) The landing distance must be determined for standard atmosphere at each weight, altitude, and wind within the operational

limits established by the applicant in accordance with § 23.75(a) of this chapter effective March 30, 1967. Instead of a gliding approach specified in § 23.75(a)(1), the landing may be preceded by a steady approach down to the 50-foot height at a gradient of descent not greater than 5.2 percent (3°) at a calibrated airspeed not less than 1.3 V_{S1}.

(*b*) The landing distance data must include correction factors for not more than 50 percent of the nominal wind components along the landing path opposite to the direction of landing, and not less than 150 percent of the nominal wind components along the landing path in the direction of landing.

(d) In lieu of compliance with Section 28 of Appendix A of Part 135 of the Federal Aviation Regulations, comply with the following:

Fatigue evaluation of flight structure. Unless it is shown that the structure, operating stress levels, materials, and expected use are comparable from a fatigue standpoint to similar design which has had substantial satisfactory service experience, the strength, detail design, and the fabrication of those parts of the wing, wing carrythrough, vertical fin, horizontal stabilizer, and attaching structure whose failure would be catastropic must be evaluated under either—

(*a*) A fatigue strength investigation in which the structure is shown by analysis, tests, or both, to be able to withstand the replaced loads of variable magnitude expected in service. Analysis alone is acceptable only when it is conservative and applied to simple structures; or

(*b*) A fail-safe strength investigation in which it is shown by analysis, tests, or both, that catastrophic failure of the structure is not probable after fatigue, or obvious partial failure, of a principal structural element, and that the remaining structure is able to withstand a static ultimate load factor of 75 percent of the critical limit load factor at V_c. These loads must be multiplied by a factor of 1.15 unless the dynamic effects of failure under static load are otherwise considered.

(e) In lieu of compliance with section 32 of Appendix A of Part 135 of the Federal Aviation Regulations, comply with the following:

Doors and exits. The airplane must meet the requirements of §§ 23.783 and 23.807(a)(3), (b), and (c) of this chapter, and in addition the following requirements:

(*a*) Each cabin must have at least one easily accessible external door.

(*b*) There must be a means to lock and safeguard each external door against opening in flight (either inadvertently by persons or as a result of mechanical failure or failure of a single structural element). Each external door must be operable from both the inside and the outside, even though persons may be crowded against the door on the inside of the airplane. Inward opening doors may be used if there are means to prevent occupants from crowding against the

door to an extent that would interfere with the opening of the door. The means of opening must be simple and obvious and must be arranged and marked so that it can be readily located and operated, even in darkness. Auxiliary locking devices may be used.

(*c*) Each external door must be reasonably free from jamming as a result of fuselage deformation in a minor crash.

(*d*) Each external door must be located where persons using it will not be endangered by the propellers when appropriate operating procedures are used.

(*e*) There must be a provision for direct visual inspection of the locking mechanism by crewmembers to determine whether external doors, for which the initial opening movement is outward (including passenger, crew, service, and cargo doors), are fully locked. In addition, there must be a visual means to signal to appropriate crewmembers when normally used external doors are closed and fully locked.

(*f*) Cargo and service doors not suitable for use as exits in an emergency need only meet paragraph (*e*) of section 5(e) of this regulation and be safeguarded against opening in flight as a result of mechanical failure or failure of a single structural element.

(*g*) The passenger entrance door must qualify as a floor level emergency exit. If an integral stair is installed at such a passenger entry door, the stair must be designed so that when subjected to the inertia forces specified in § 23.561 of this chapter, and following the collapse of one or more legs of the landing gear, it will not interfere to an extent that will reduce the effectiveness of emergency egress through the passenger entry door. Each additional required emergency exit except floor level exits must be located over the wing or must be provided with acceptable means to assist the occupants in descending to the ground. In addition to the passenger entrance door—

(*1*) For a total seating capacity of 15 or less, an emergency exit, as defined in § 23.807(b) of this chapter, is required on each side of the cabin;

(*2*) For a total seating capacity of 16 through 23, three emergency exits, as defined in § 23.807(b) of this chapter, are required with one on the same side as the door and two on the side opposite the door; and

(*3*) For a total seating capacity in excess of 23, the number of emergency exits and their kind and distribution must be approved by the Administrator.

(*h*) An evacuation demonstration must be conducted utilizing the maximum number of occupants for which certification is desired. It must be conducted under simulated night conditions utilizing only the emergency exits on the most critical side of the aircraft. The participants must be representative of average airline passengers with no prior practice or rehearsal for the demonstration. Evacuation must be completed within 90 seconds.

(*i*) Each emergency exit must be marked with the word "Exit" by a sign which has white letters 1 inch high on a red background 2 inches high, be self-illuminated or independently internally electrically illuminated, and have a minimum luminescence (brightness) of at least 160 microlamberts. The colors may be reversed if the passenger compartment illumination is essentially the same.

(*j*) Access to window type emergency exits may not be obstructed by seats or seat backs.

(*k*) The width of the main passenger aisle at any point between seats must equal or exceed the values in the following table:

Total seating capacity	*Minimum main passenger aisle width*	
	Less than 25 inches from floor	*25 inches and more from floor*
10 through 23	9 inches	15 inches.
over 23	15 inches	20 inches.

(f) In lieu of compliance with Section 45 of Appendix A of Part 135 of the Federal Aviation Regulations, comply with § 23.954 of this chapter.

(g) In lieu of compliance with Section 56 of Appendix A of Part 135 of the Federal Aviation Regulations, comply with the following:

Cowlings. The airplane must be designed and constructed so that no fire originating in any engine compartment can enter, either through openings or by burn through), any other region where it would create additional hazards.

(h) In lieu of compliance with Section 57 of Appendix A of Part 135 of the Federal Aviation Regulations, comply with § 25.863 of this chapter.

6. *Additional requirements—general.* The additional requirements specified in sections 7 through 14 apply to the certification of airplanes pursuant to section 1.(b) of this Special Federal Aviation Regulation.

7. *Compartment interiors.* (a) If smoking is to be prohibited, there must be a placard so stating, and if smoking is to be allowed—

(1) There must be an adquate number of self-contained removable ashtrays; and

(2) Where the crew compartment is separated from the passenger compartment, there must be at least one sign (using either letters or symbols) notifying all passengers when smoking is prohibited. Signs which notify when smoking is prohibited must—

(i) Be legible to each passenger seated in the passenger cabin under all probable lighting conditions; and

(ii) When illuminated, be so constructed that the crew can turn them on and off.

(b) Each disposal receptacle for towels, paper, or waste must be fully enclosed and constructed of at least fire resistant materials, and must contain fires likely to occur in it under normal use. The ability of the disposal receptacle to contain those fires under all probable conditions of wear, misalignment, and ventilation expected in service must be demonstrated by test. A placard containing the legible words "No Cigarette Disposal" must be located on or near each disposal receptacle door.

(c) Lavatories must have "No Smoking" or "No Smoking in Lavatory" placards located conspicuously on each side of the entry door, and self-contained removable ashtrays located conspicuously on or near the entry side of each lavatory door, except that one ashtray may serve more than one lavatory door if it can be seen from the cabin side of each lavatory door served. The placards must have red letters at least one-half inch high on a white background at least one inch high. (A "No smoking" symbol may be included on the placard).

(d) There must be at least one hand fire extinguisher conveniently located in the pilot compartment.

(e) There must be at least one hand fire extinguisher conveniently located in the passenger compartment.

8. *Landing gear.* Comply with §§ 25.721(a)(2), (b), and (c) of this chapter in effect on September 26, 1978.

9. *Fuel system components crashworthiness.* Comply with §§ 25.963(d) and 25.994 of this chapter in effect on September 26, 1978.

10. *Shutoff means.* Comply with § 23.1189 of this chapter in effect on September 26, 1978.

11. *Fire detector and extinguishing systems.*

(a) *Fire detector systems.*

(1) There must be a means which ensures the prompt detection of a fire in an engine compartment.

(2) Each fire detector must be constructed and installed to withstand the vibration, inertia, and other loads to which it may be subjected in operation.

(3) No fire detector may be affected by any oil, water, other fluids, or fumes that might be present.

(4) There must be means to allow the crew to check, in flight, the function of each fire detector electric circuit.

(5) Wiring and other components of each fire detector system in an engine compartment must be at least fire resistant.

(b) *Fire extinguishing systems.*

(1) Except for combustor, turbine, and tail pipe sections of turbine engine installations that contain lines or components carrying flammable fluids or gases for which it is shown that a fire originating in these sections can be controlled, there must be a fire extinguisher system serving each engine compartment.

(2) The fire extinguishing system, the quantity of the extinguishing agent, the rate of discharge, and the discharge distribution must be adequate to extinguish fires. An individual "one shot" system may be used.

(3) The fire-extinguishing system for a nacelle must be able to simultaneously protect each compartment of the nacelle for which protection is provided.

12. *Fire extinguishing agents.* Comply with § 25.1197 of this chapter in effect on September 26, 1978.

13. *Extinguishing agent containers.* Comply with § 25.1199 of this chapter in effect on September 26, 1978.

14. *Fire extinguishing system materials.* Comply with § 25.1201 of this chapter in effect on September 26, 1978.

Expiration. This Special Federal Aviation Regulation terminates on October 17, 1981, unless sooner rescinded or superseded.

Ch. 6

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